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Concl'd filter, image size conversion, image trimming, image movement,
color image trimming, color correction, and tone conversion.--

REMARKS

Favorable reconsideration of the present application in view of the present amendment and in light of the following discussion is respectfully requested.

Claims 1-11 are currently pending in the application, Claims 1-5 amended, and Claims 6-11 added by way of the present amendment.

In the outstanding Official Action, the abstract and title were objected to and a substitute specification was required; Claims 1-5 were rejected under 35 U.S.C. § 112, second paragraph; Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,691,237 to Shimizu; Claims 2-4 were rejected under 35 U.S.C. § 103 as being unpatentable over Shimizu in view of U.S. Patent No. 4,962,430 to Hiroki et al; and Claim 5 was rejected under 35 U.S.C. § 103 as being unpatentable over Shimizu and Hiroki et al in view of German Patent No. DE 33-37-682 C2 or the leaflet by Siemens from 1987.

In response to the objection to the abstract, a new abstract has been submitted. Applicants respectfully submit that the substitute abstract contains no new matter.

In response to the request for a substitute specification, a substitute specification has been submitted.

Applicants respectfully submit, that the substitute specification contains no new matter.

In response to the objection to the title, new title which is more descriptive has been submitted with the substitute specification.

In addition, submitted herewith is a separate letter requesting approval for drawing changes. In the drawings Fig. 10, designation "209I", which appears to be mislabeled, will be changed to --209T--. Upon receiving approval for the requested drawing changes and upon receiving a formal notice of allowance, Applicants will file formal drawings including the drawing changes.

In response to the rejections of Claims 1-5 under 35 U.S.C. § 112, second paragraph, Applicants respectfully submit that the informalities noted by the Examiner have been corrected by way of the present amendment. Accordingly, in view of the above changes to Claims 1-5, the rejections under 35 U.S.C. § 112, second paragraph, are believed to have been overcome, and no further rejection on that basis is anticipated. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work with the Examiner in a joint effort to derive mutually satisfactory claim language. Further, the above changes to Claims 1-5 are believed to find clear support in Applicants' disclosure as originally filed, and are not believed to raise a question of new matter.

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In response to the several grounds for rejection on the merits, Claim 1 has been amended to define Applicants' invention in terms of a copying system using first and second synchronization signals, wherein first and second synchronization signals generated in the scanner and printer modules, respectively, and which are synchronized with each other by using crystal oscillators of substantially the same frequency, the first synchronization signal being used by the scanner module for image reading and the second synchronization signal being used by the printer module for image forming. In the copying system as claimed in Claim 1, since the first and second synchronization signals are synchronized with each other, coincidence is maintained between header phases and cycles of the image reading and forming operations, which permits one to dispense with an intermediate buffer memory card between the scanner and printer modules.

In contrast, Shimizu teaches supplying a video clock signal ("CLK") to the reader as well as to the printer/image file controller. The clock signal is generated in the reader module and is distributed to other modules (printer/image file controller), and a module having received the CLK signal uses it for video signal latching. The video CLK is a signal which synchronizes to a pixel, and is the fastest CLK inside a copying machine. In conventional systems using a single distributed CLK signal, complicated transmission/receiver circuits are typically required to ensure a CLK signal having

a specified pulse waveform, and to avoid errors generated by skew due to propagation delay time and the length of the transfer path (accordingly also a distance between modules). In addition, since the video CLK is a signal which synchronizes to a pixel, as copying speed goes higher, the problems described above may become more serious.

The copying system according to the present invention, has an independent sync signal generating means in each scanner and printer module, so that each of the modules can generate a video CLK independently, which eliminates the necessity of distributing a video CLK to each module.

Further, Shimizu teaches a horizontal/vertical sync signal which is used in the reader and is (1) generated in the reader itself, or (2) generated by a printer and sent to and used by the reader. Accordingly, the Shimizu invention requires a circuit and a control program for the two types of control operations, which results in a more complicated system, difficult in operation, and higher cost than the present invention.

In contrast, the copying system according to the present invention, advantageously, requires only one type of control means since each printer and scanner module has a synchronization signal generation means.

Applicants respectfully submit, that although Shimizu teaches a system using a reader, printer and controller module, Shimizu fails to teach using first and second crystal oscillators contained within a first and second

synchronization signal generating means, respectively.

Shimizu teaches synchronizing the system by using a synchronization signal from either the printer, controller or reader module (see column 5, line 52 to column 6, line 19). Accordingly, Applicants respectfully submit that amended Claim 1 is patentably distinguishable over Shimizu. Further, Applicants submit that the remaining applied references fail to cure the above-noted deficiencies of Shimizu.

In response to the rejection of Claims 2-5 on the merits, Applicants respectfully submit that Claims 2-5 are in condition for allowance since they depend from Claim 1, which is now believed to be allowable.

Applicants submit that new Claims 6-11 are allowable since Claim 6 includes limitations from Claim 1 which are believed allowable. Further, Applicants submit that Claims 6-11 do not raise a question of new matter since Claim 6 corresponds to Claim 1 and Claims 7-11 find support in a least Figs. 18A-18C, 19A and 19B and the discussion thereof.

Consequently, in view of the present amendment, and in light of the above discussion, it is respectfully submitted that the claims as submitted herewith are in condition for

allowance, and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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